

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-4. (canceled)

5. (original) A method of manufacturing a semiconductor device that includes a substrate and a dielectric layer formed on the substrate, the method comprising:

etching the dielectric layer to form a first fin structure;

depositing an amorphous silicon layer;

etching the amorphous silicon layer to form a second fin structure adjacent a first side surface of the first fin structure and a third fin structure adjacent a second, opposite side surface of the first fin structure;

depositing a metal layer on at least upper surfaces of the second fin structure and the third fin structure;

performing a metal-induced crystallization operation to convert the amorphous silicon in the second and third fin structures to a single-crystal silicon material;

forming a source region and a drain region;

depositing a gate material over the first, second, and third fin structures;

and

patterning and etching the gate material to form at least one gate electrode.

6. (original) The method of claim 5 wherein a width of the first fin structure ranges from about 200 Å to about 1000 Å.

7. (currently amended) The method of claim 5 wherein the dielectric layer comprises at least ~~one of~~ an oxide ~~[[and]]~~ or a nitride.

8. (original) The method of claim 5 wherein a width of each of the second fin structure and the third fin structure ranges from about 100 Å to about 1000 Å.

9. (original) The method of claim 5 further comprising:
forming a second dielectric layer prior to depositing the metal layer; and
planarizing the second dielectric layer to expose upper surfaces of the second fin structure and the third fin structure.

10. (original) The method of claim 5 wherein the performing a metal-induced crystallization operation forms a metal-silicon compound at a bottom surface of each of the second fin structure and the third fin structure.

11. (original) The method of claim 10 wherein a thickness of the metal-silicon compound ranges from about 20 Å to about 200 Å.
12. (original) The method of claim 5 wherein the depositing a metal layer includes:

depositing a nickel layer to a thickness of about 20 Å.
13. (original) The method of claim 5 wherein the performing includes:

annealing the second fin structure and the third fin structure at a temperature of about 500 °C to about 550 °C.
14. (original) The method of claim 13 wherein the annealing is performed for at least two hours.
- 15-19. (canceled)
20. (new) A method for forming fin structures for a semiconductor device, comprising:

forming a first fin structure comprising a dielectric material and including a first side surface and a second side surface;

forming a second fin structure adjacent the first side surface of the first fin structure; and

forming a third fin structure adjacent the second side surface of the first fin structure, the second fin structure and the third fin structure being formed of a different material than the first fin structure.

21. (new) The method of claim 20 wherein the forming a first fin structure includes:

forming the first fin structure to a width ranging from about 200 Å to about 1000 Å.

22. (new) The method of claim 20 wherein the dielectric material includes an oxide or a nitride.

23. (new) The method of claim 20 wherein the forming a second fin structure includes:

forming the second fin structure to a width ranging from about 100 Å to about 1000 Å, and

wherein the forming the third fin structure includes:

forming the third fin structure to a width ranging from about 100 Å to about 1000 Å.

24. (new) The method of claim 20 wherein the forming the second fin structure and the third fin structure includes:

depositing an amorphous silicon layer, and
etching the amorphous silicon layer to form the second fin structure
adjacent the first side surface of the first fin structure and the third fin structure adjacent
the second side surface of the first fin structure.

25. (new) The method of claim 24 further comprising:

depositing a metal layer on at least upper surfaces of the second fin
structure and the third fin structure; and

performing a metal-induced crystallization operation to convert the
amorphous silicon in the second and third fin structures to a single-crystal silicon
material.

26. (new) A method for forming fin structures for a semiconductor device
that includes a substrate and a dielectric layer formed on the substrate, the method
comprising:

etching the dielectric layer to form a first fin structure;

depositing an amorphous silicon layer; and

etching the amorphous silicon layer to form a second fin structure adjacent
a first side surface of the first fin structure and a third fin structure adjacent a second,
opposite side surface of the first fin structure.

27. (new) The method of claim 26 further comprising:

depositing a metal layer on at least upper surfaces of the second fin structure and the third fin structure; and

performing a metal-induced crystallization operation to convert the amorphous silicon in the second and third fin structures to a single-crystal silicon material.

28. (new) The method of claim 26 wherein the etching the dielectric layer includes:

forming the first fin structure to a width ranging from about 200 Å to about 1000 Å, and

wherein the etching the amorphous silicon layer includes:

forming the second fin structure to a width ranging from about 100 Å to about 1000 Å, and

forming the third fin structure to a width ranging from about 100 Å to about 1000 Å.

29. (new) The method of claim 26 wherein the dielectric material includes an oxide or a nitride.